1   **REMARKS**

2   This paper is filed in response to the first office action. Reconsideration and

3   favorable action are respectfully requested, for the following reasons.

4   As to the restriction requirement stated on page 2, the undersigned confirms the

5   provisional election that was made with traverse to prosecute the invention of original

6   claims 17-31. Claims 1-16 as originally filed have been withdrawn from further

7   consideration and canceled as being drawn to a non-elected invention.[1]

8   The Examiner's request (page 3, paragraph 2) that all future correspondence

9   include recommended claim line numbering is noted and will be followed, starting with

10 this submission. The undersigned apologies for any inconvenience associated with the

11 original submission.

12   The Examiner has also requested (page 3, paragraph 3) an update of the status of

13 the parent priority application in the first line of the specification. To this end, the phrase

14 ", now abandoned" has been added to identify the current status of the identified

15 provisional application. The original sentence has also been amended to correct a

16 typographical error.

17   The objection to the current oath is noted, although it does not appear that the

18 original oath was formally "defective." Nevertheless, given the priority application claim,

19 a Substitute Oath is now being obtained and will be submitted shortly. The undersigned

20 apologizes for the delay and any inconvenience.

21   On page 2, paragraph, the Examiner has requested that the cited trademark

22 FREEFLOW be capitalized in the written description and accompanied by the generic

23 recitation of the associated service. The written description has been amended

24 accordingly.

25   The Examiner is quite correct that the numbering of the claims failed to satisfy

26 Rule 126 as there was a duplicate claim 22 submitted with the Preliminary Amendment

27 filed December 4, 2002. The undersigned apologizes for this error. Thus, there were two

28 (2) occurrences of claim 22, a first occurrence (what the Examiner identified as "claim

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[1] The action states that the Examiner spoke with "Mr. Judson" on November 25, 2004,
however, the actual conversation was with another lawyer then of record, Mr. Martin Korn.

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1   22a") and a second occurrence (what the Examiner identified as "claim 22b"). To address

2   this problem, claim 22a has been AMENDED and claim 22b CANCELED. The remaining

3   claims 23-31 continue to maintain their original numbering scheme as the Examiner has

4   requested.

5   Dependent claim 29 has been rewritten. In particular, the "given piece of content"

6   as originally defined has been expanded to include an embedded object of a markup

7   language page, a media file, and a software download. This language formulation is

8   supported by the original written description at, for example, page 1, lines 13-14 (directed

9   to "Web content, streaming media and applications"), the text at page 7, line 31 (directed

10   to "graphics, images, streaming media, HTML and the like"), and so forth. Dependent

11   claim 30 has been rewritten in a like manner, and also to change its dependency (from

12   independent claim 25) to independent claim 17.

13   In addition, new claims 32-39 have been added for consideration. Independent

14   claim 33 is similar to the formulation of independent claim 25, however, the Examiner will

15   note that the "alias[ing]" portion of the first step of previously presented claim 25 has been

16   moved into the preamble of claim 33.

17   Claims 17-19, 22b-26, and 29-31 were rejected under 35 U.S.C. § 102(e) as being

18   anticipated by Li, U.S. Patent No. 6,799,214. Claims 20-22, and 27-28 were rejected

19   under 35 U.S.C. § 103(a) as being unpatentable over Li, further in view of Amstein et al,

20   U.S. Patent No. 5,793,966. Respectfully, these rejections are traversed, for the reasons set

21   forth below.

22   The Li disclosure uses some of the nomenclature of the claimed invention (e.g.,

23   "content delivery," "content provider" and the like) but actually relates to a completely

24   different solution and architecture that does not disclose or remotely suggest the claimed

25   invention. Indeed, it appears that the Examiner is relying upon Li's use of the

26   nomenclature "meta tag" with respect to the subject invention's reference to "metadata."

27   As will be seen, however, Li's meta tag is something completely different from the

28   claimed metadata, both in structure and function. In particular, Li's meta tag is not used

29   for the same purposes that the present invention uses "metadata," and these very significant

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1   differences underlie (in part) why the claimed invention is neither anticipated nor obvious

2   in view of this teaching.

3   It was well known before Li's invention to incorporate a so-called "meta tag" into

4   the Hypertext Markup Language code (HTML) of a Web page and to include, in that tag, a

5   so-called "refresh" directive that, in effect, caused an end user browser interpreting that

6   page to be redirected to another URL (another Web page) after a given timeout as specified

7   in the refresh. Indeed, the "meta tag" construct was part of the original HTML 2.0

8   specification that was published as early as 1995. *See, e.g.*, HTML 2.0 (RFC 1866,

9   Section 5.2.5: available at http://www.ietf.org/rfc/rfc1866.txt). The use of this tag for

10   redirecting a browser to another location had also been known before Li's invention. Li

11   simply incorporated the concept of the HTML meta tag refresh directive into a content

12   delivery system. In particular, Li taught having a content provider origin site respond to a

13   request for content (being managed by the content delivery system on a set of "mirror

14   sites") by returning a redirection page having a meta tag refresh to a URL of one of the

15   mirror sites. The Li content delivery system architecture and browser redirect function is

16   very similar to that described in the (previously of record) Farber et al. U.S. Patent No.

17   6,185,598, except that the '598 patent taught using an "http 302" redirect directive instead

18   of a meta tag refresh directive.[2] The content delivery system of Farber et al. worked in

19   basically the same way as described in Li, namely, content was placed on mirror sites and

20   content provider site included software for rewriting page HTML to re-direct an end user

21   browser to one of the mirror sites.

22   In contrast, the subject invention does not concern "meta tags" that are used for end

23   user browser redirection but, rather, describes use of "metadata" in the form of a "given

24   content control requirement" that instructs a content delivery network "content server"

25   how to manage a given piece of requested content before that server serves that content to

26   the requesting end user. In other words, Li is concerned with how to get an end user

27   browser to the CDN content server (and he does so by having the origin site serve a blank

28   page with an HTML meta tag refresh directive), whereas the subject invention primarily is

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[2] U.S. Patent No. 5,991,809 to Kriegsman, also of record, is quite similar to Li in this
regard.

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1   concerned with how the CDN content server (once the end user browser gets there)

2   actually manages and serves the content being requested. These are two disparate

3   problems.

4   To the end, the Examiner will note that independent claims 17 and 25 each require

5   the step of "for a given piece of content, specifying, as metadata, a <u>given content control</u>

6   <u>requirement,</u>" which the written description describes as a "set of control options and

7   parameters that determine how a CDN content server will handle a request for an object"

8   (see, e.g., text at page 8, line 21; page 2, lines 26-31 through page 3, line 2). Examples of

9   such content control requirement metadata are provided, for example, on page 8, lines 25-

10   30 and throughout the written description. The "given piece of content" is that content

11   that "a participating content provider" has identified for delivery over the content delivery

12   network. Li's "meta tag" is clearly not "content control requirement metadata" as the

13   Office Action (page 4, paragraph 8) contends.[3]

14   MPEP § 2131 provides that a "claim is anticipated <u>only</u> if each and every element

15   as set forth in the claim is found, either expressly or inherently described in a single prior

16   art reference. ... 'The <u>identical invention must be shown in as complete detail as contained</u>

17   <u>in the ... claim.</u>' The elements must be arranged as required by the claim." (citations

18   omitted, emphasis supplied). This requirement was not met for either independent claim

19   17 or independent claim 25 as previously presented as Li does not (for a <u>given piece of</u>

20   <u>content</u>) specify, as metadata, a given content control requirement, or describe how any

21   such metadata might be communicated to the content servers.

22   Because Li's meta tag is not the claimed "given content control requirement

23   [specified] as metadata," none of these required steps is disclosed or suggested by the

24   reference. For this reason alone, Li cannot anticipate any of the identified claims.

25   Separate and distinct from the meta tag – metadata dichotomy, there are several

26   other reasons why Li cannot and does not anticipate. Each of independent claims 17 and

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[3] Li does make a passing reference to the assignment of a content "expiration time" (see Column 12, line 66+) but does not indicate that any such information be specified as metadata or otherwise specify "communicating the metadata ... to the set of content servers."

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1   25 (in their first step) require "having a participating content provider associate [or alias] a

2   content provider domain or subdomain with [to] a domain managed by a content delivery

3   network service provider." The written description provides several examples of this step,

4   e.g., aliasing (through a canonical name or "CNAME") a content provider domain, such as

5   www.cnn.com, to a CDN service provider domain, such as "a123.g.cdnsp.net". Li makes

6   no mention of any such aliasing to a CDN service provider domain.

7   　　　　Moreover, each of independent claims 17 and 25 also include a "resolving" step

8   that is not simple DNS as described by Li (see, e.g., the text beginning at Column 3, line

9   50+). Looking at the phrase in claim 17, the Examiner is reminded that the clause requires

10 resolving a client query "to the content provider domain or subdomain ... using the domain

11 managed by the content delivery network service provider." In Li, at most the DNS there

12 resolves the original URL (identifying the content provider origin site) and perhaps the

13 URL in the meta tag refresh directive (identifying the mirror site). In contrast, the claimed

14 step involves resolving a client query to a content provider domain (or subdomain) using

15 something else entirely, namely, the content delivery network service provider domain.

16 Thus, continuing with the above example (which is merely for illustrative purposes of

17 course), the claimed step would resolve an end user browser query to www.cnn.com using

18 the "a123.g.cdnsp.net" alphanumeric string. There is nothing in Li that discloses or

19 remotely suggests any such step or function.

20 　　　　As noted above, MPEP § 2131 mandates that an anticipation rejection is only

21 proper if the identical invention is shown in as complete detail as contained in the claim.

22 "The elements must be arranged as required by the claim." Li did not meet this rigid

23 requirement as to either independent claim 17 or 25. Thus, the rejection should be

24 withdrawn.

25 　　　　New independent claim 33 is not anticipated by Li for the same reasons.

26 　　　　Dependent claims 18-24 and 29 likewise are not anticipated by Li for the reasons

27 set forth above with respect to independent claim 17. Dependent claims 25-28 and 32-33

28 are not anticipated by Li for the reasons set forth above with respect to independent claim

29 25.

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1   The obviousness rejection based on a combination of Li and Amstein et al. also

2   should be withdrawn. In the first instance, Amstein et al. make a passing reference to

3   "meta information about a service and its document objects" but this is not the claimed

4   "content control requirement metadata." Nor do Amstein et al. describe applying any such

5   metadata at a given content server of a CDN. More to the point, Amstein et al. do not

6   disclose or suggest the other steps of either independent claim 17 or 25 relating to

7   "associating [aliasing] a content provider domain or subdomain with [to] a domain

8   managed by a content delivery network service provider," or how the CDN service

9   provider domain is used to resolve a client query to a content provider domain or

10 subdomain. Further, the Examiner has not made out a prima facie case of obviousness, as

11 any permissible combination of the references would still lack at least these elements of the

12 claimed invention.

13   Several of the previously submitted and newly presented dependent claims describe

14 additional subject matter that is neither disclosed nor suggested by either Li or Amstein et

15 al. In particular, these references do not describe, among other things, a content control

16 requirement to enforce a given authentication method (namely, at a given CDN content

17 server), a content control requirement to enforce a given access control method, a content

18 control requirement to invoke a security mechanism, or the concept of communicating data

19 (let alone metadata) to a given CDN content server "by one of: a request string, a header,

20 and a configuration file." These differences are merely representative.

21   Reconsideration and favorable action in the form of a Notice of Allowance are

22 respectfully requested in view of the above comments.

23   An appropriate extension of time is submitted herewith to extend the period for

24 response up to and including June 14, 2005. The fee for this extension should be charged

25 to Deposit Account 501269 in the name of Akamai Technologies, Inc.

26   A Supplemental Information Disclosure Statement is submitted herewith, together

27 with a request to charge the required processing fee to the above-identified deposit

28 account.

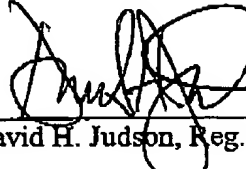29   A Change of Correspondence Address is also included.

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Respectfully submitted,

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